

CSEQ: Life-long Learning Index Survey

Spring 2001 Administration

Executive Summary

The “Life-Long Learning Index,” a composite measure of student self-ratings of gains in eleven specific areas of learning, was administered in Spring 2001. This survey has now been administered for five years, providing a mechanism for tracking fluctuations in student-reported learning progress over time. Many of the items provide valuable insight into the College’s efforts to meet HECB, Legislative, and institutional learning goals for our students. Three of the items are reported to the HECB annually as part of Evergreen’s Accountability Performance Measures: freshmen gains in “familiarity with the use of computers,” freshmen gains in “quantitative thinking,” and gains for all students in “understanding other people and the ability to get along with different kinds of people.”

The sample was composed of all of the first-time freshmen who were admitted to Evergreen for fall 2000 and were still enrolled for spring quarter 01 (N= 406), plus a random sample of 400 admitted sophomores, juniors, and seniors who were enrolled for spring 2001. The overall response rate was 61% (491 surveys completed of 806 mailed).

Key Findings

- Accountability Performance Measures reported to the HECB and the State Legislature: Mean scores for freshmen over the previous year increased for “familiarity with the use of computers” (2.15 to 2.25) and “quantitative thinking” (1.79 to 1.99). The mean score for all students on “understanding other people and the ability to get along with different kinds of people” remains high (about 3.3 for the past four years).
- 90% of the students progressed “quite a bit” or “very much” in their “ability to learn on their own and find information they need.”
- 88% had gained “quite a bit” or “very much” in their ability to synthesize ideas.
- 83% have made considerable gains in “understanding and getting along with other people.”
- The group mean for “familiarity with the use of computers” increased to 2.35 this year from 2.29 last year, and the group mean for “quantitative thinking” increased to 2.15 this year from 1.95 last year.
- 24% reported “very little” progress in “familiarity with the use of computers”
- 30% progressed “very little” in both “quantitative thinking” skills and “understanding new scientific and technical developments.”
- Four items with low mean scores (“background for further education in a prof/sci/scholarly field,” “use of computers,” “quantitative thinking,” and “new scientific/technical developments”) showed significantly higher scores with higher class standing, but there were no significant differences for these four items by gender or by race (when collapsed as Caucasian/People of Color).

I. Introduction

In 2001, the “Life-Long Learning Index” portion of the College Student Experience Questionnaire was administered to current Evergreen students for the 5th consecutive spring quarter. Students reported their estimated gains in learning at Evergreen in eleven specific areas, using a 4-point scale (4=Very much to 1=Very little).

The “Life-Long Learning Index” is a composite measure of the student ratings on each of the following individual items:

- Acquiring background and specialization for further education in some professional, scientific, or scholarly field.
- Gaining a broad general education about different fields of knowledge
- Writing clearly and effectively
- Acquiring familiarity with the use of computers
- Understanding other people and the ability to get along with different kinds of people
- Ability to function as a team member
- Understanding new scientific and technical developments
- Ability to think analytically and logically
- Quantitative thinking – understanding probabilities, proportions, etc.
- Ability to put ideas together, to see relationships, similarities, and differences between ideas
- Ability to learn on your own, pursue ideas, and find information you need

The administration of this survey each spring provides a mechanism for tracking fluctuations in student-reported learning progress over time. Many of the items provide valuable insight into the College’s efforts to meet HECB, Legislative, and institutional learning goals for our students. Three of the items in the survey are reported to the HECB annually as part of Evergreen’s Accountability Performance Measures: freshmen gains in “familiarity with the use of computers,” freshmen gains in “quantitative thinking,” and gains for all students in “understanding other people and the ability to get along with different kinds of people.”

II. Methodology

The original sample for the spring 2001 survey administration was selected in two parts. The first part included all of the first-time freshmen who were admitted to Evergreen for fall 2000 and were still enrolled for spring quarter 01. The second part of the sample was a random sample of 400 admitted sophomores, juniors, and seniors who were enrolled for spring 2001. Since a student could potentially meet the criteria for both parts of the sample, duplicated students were eliminated when the samples were merged into a single file. (Some first-time freshmen enter Evergreen with advanced class-standing due to pre-college credits earned through AP classes and Running Start.) 806 students remained in the survey contact pool.

A survey crew of 6 students was recruited, and they were trained in survey administration, data tracking, and inter-rater reliability. The crew was provided with a list of informed responses to common questions they might be asked, and each crewmember signed a confidentiality agreement regarding the handling and use of student contact information. Each crewmember was issued a binder in which they tracked their

efforts to contact each member of the sample. No incentives were offered to the survey respondents, and the survey only took 2-3 minutes to complete by telephone.

Telephone administration of the survey was attempted for a 6-week period from April 18th until May 31st. Throughout the administration period, efforts were made to locate new telephone numbers for those students whose contact information was out-of-date per the registration data system. Completions and refusals were tracked weekly in order to gauge response rates. It took an average of 4.56 contact attempts by the survey crew to complete a CSEQ survey by phone. At the end of the 6-week calling period, 423 surveys were completed (52.5%), and 31 students had refused to participate (3.8%).

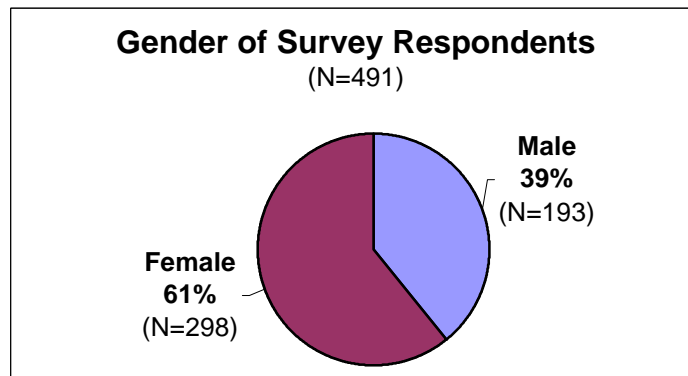
On May 31st, a final meeting of the survey crew was held, and surveys were mailed out to all remaining members of the original sample with whom successful contact had not yet been made (N=350). Postage-paid return envelopes were provided with the surveys to facilitate participation. A deadline of June 16th was selected for survey completion to coincide with the end of the academic year. Surveys continued to trickle in after the deadline, however, and they were accepted until August 9th, 2001 when analysis of the data began. 68 additional surveys were received through the mail.

III. Response Rates and Sample Demographics

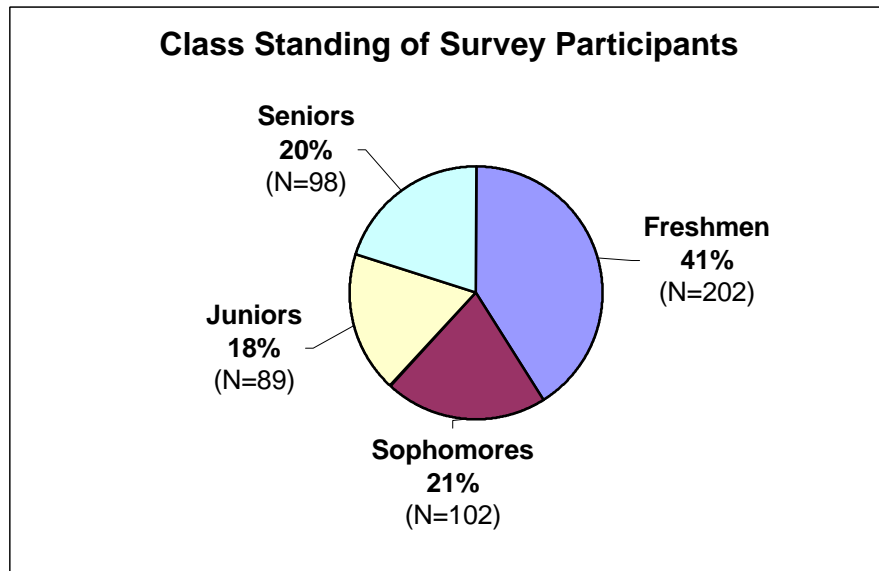
Final statistics on response and contact rates for the sample pool are presented in the following table:

Original Sample Pool	N=806	100%
Completed Surveys	N=491	60.9%
Did Not Participate <i>(includes no response and refusals)</i>	N=307	38.1%
Unable to locate <i>(no current telephone number and address)</i>	N=8	1.0%

The gender distribution of the students who completed the CSEQ survey presented in the next chart.



The distribution of the survey participants by their class standing is presented in the following chart.



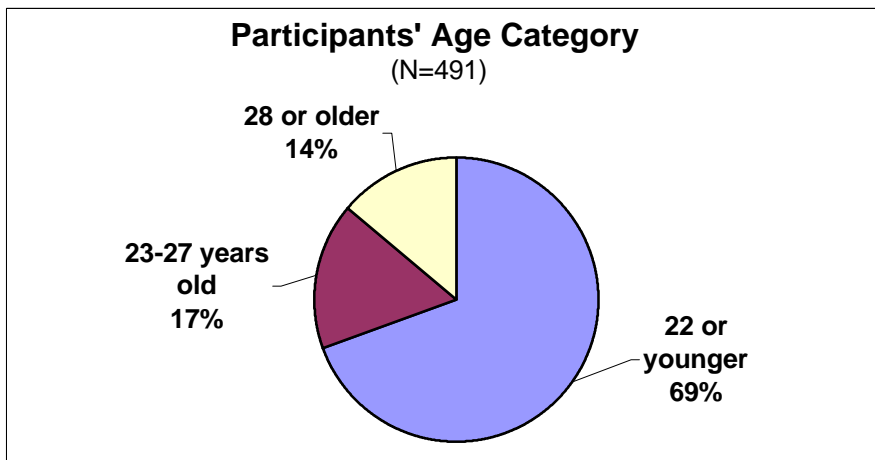
The race/ethnicity code of the survey respondents as denoted in the student registration system is presented below.

Race/Ethnicity	N of survey respondents (N=491)	% of survey respondents
African-American	10	2.0%
Asian/Pacific Islander	21	4.3%
Caucasian	355	72.3%
Hispanic	15	3.1%
Native American	16	3.3%
Race Not Indicated	74	15.1%

Since the number of participants in each race sub-category was too low for analysis, tests for significant differences in CSEQ variables by race/ethnicity were conducted using the following collapsed version of this demographic variable. Two additional columns in the table provide the same race/ethnicity characteristics of all enrolled first-time freshmen and all undergraduates at Evergreen in fall 2000 for reference purposes. The difference between the race/ethnicity distribution of survey respondents and total undergraduates is primarily a result of the sample selected. Remember that 100% of the first-time freshmen were included in the sample, whereas only a random sample of sophomores-seniors were included. Thus, the overall race demographics of the survey participants correspond more closely to the demographics of first-time freshmen, than to all undergraduates at Evergreen.

Race/Ethnicity	N of survey respondents	% of survey respondents	All enrolled first-time freshmen fall 2000 (N=483)	All enrolled undergraduates fall 2000 (N=3901)
People of Color	62	12.6%	12.4%	16.5%
Caucasian/ Not Indicated	429	87.4%	87.6%	83.5%

- 63.5% of the students who completed surveys have Washington resident status, and the other 36.5% are non-residents.
- 36.5% of the surveyed students reported having transferred to Evergreen from another college, while 63.5% entered college at Evergreen.
- At the beginning of the survey, students identified the age category to which they belonged; their responses are presented in the next chart.



Several demographic variables were present in the original sample pool database that allowed some comparison of students who completed the CSEQ and members of the sample who did not participate. No significant differences were discovered between responders and non-responders with regard to race/ethnicity, class standing, or residency status; however, one difference was revealed between the two groups. A significantly higher proportion of female members of the sample pool completed the CSEQ survey (66%), compared to male students (54%); this difference was significant at $p=.000$, 99% confidence.

IV. Overall Results

The following table presents the overall frequencies of responses and group means for all eleven items on the learning gains scale. The items are listed in order of highest mean score to lowest mean score. The number of students who responded to each question varies slightly, since students sometimes skipped questions or refused to select a single scale value.

Overall CSEQ 2001 Frequencies and Group Means

Mean score	Learning Gain Item	1 Very Little	2 Some	3 Quite a Bit	4 Very Much
3.45	Learn on your own, pursue ideas, and find information you need (<i>N</i> =491)	1.4%	8.4%	34.4%	55.8%
3.36	Put ideas together, to see relationships, similarities, and differences between ideas (<i>N</i> =491)	0.4%	11.8%	39.3%	48.5%
3.29	Understanding other people and how to get along with different kinds of people (<i>N</i> =491)	2.4%	14.3%	35.0%	48.3%
3.12	Functioning as a team member (<i>N</i> =488)	2.9%	19.9%	39.8%	37.5%
3.05	Thinking analytically and logically (<i>N</i> =490)	2.7%	21.0%	44.7%	31.6%
2.95	Broad general education about different fields of knowledge (<i>N</i> =491)	3.7%	23.8%	46.8%	25.7%
2.91	Writing clearly and effectively (<i>N</i> =490)	5.5%	25.3%	42.0%	27.1%
2.71	Background and specialization for further education in some professional, scientific, or scholarly field (<i>N</i> =488)	8.4%	33.2%	37.7%	20.7%
2.35	Familiarity with the use of computers (<i>N</i> =490)	24.1%	35.1%	22.4%	18.4%
2.15	Quantitative thinking – understanding probabilities, proportions, etc. (<i>N</i> =487)	30.2%	36.1%	22.6%	11.1%
2.14	Understanding new scientific and technical developments (<i>N</i> =487)	30.6%	36.1%	21.6%	11.7%

The table of overall responses provides some interesting information. The various items point out the areas in which most of our students feel they progressing well, and other areas in which they are not as confident of their gains. 90% of the students progressed “quite a bit” or “very much” in their “ability to learn on their own and find information they need.” 88% had gained “quite a bit” or “very much” in their ability to synthesize ideas. 83% have made considerable gains in “understanding and getting along with other people.”

At the other end of the spectrum, 24% reported “very little” progress in “familiarity with the use of computers,” and about 30% progressed “very little” in both “quantitative thinking” skills and “understanding new scientific and technical developments.” There is good news, however, about of the items near the bottom of the table. The group mean for “familiarity with the use of computers” increased to 2.35 this year from 2.29 last year, and the group mean for “quantitative thinking” increased to 2.15 this year from 1.95 last year. The next two tables provide some additional detail about the increases in these two variables; the changes are particularly important since Evergreen tracks freshmen ratings on these two items as Accountability Performance Measures reported to the HECB and the State Legislature.

In comparison to the previous year, learning gains in “familiarity with the use of computers” were indicated for all classes except sophomores.

Familiarity with the use of computers	Mean for this group 2000	Mean for this group 2001	Change
Freshmen	2.15	2.25	+.10
Sophomores	2.33	2.18	-.15
Juniors	2.48	2.57	+.09
Seniors	2.31	2.55	+.24
All students	2.29	2.35	+.06

The 2001 administration also showed higher ratings for all classes in “quantitative thinking” skills compared to the 2000 survey.

Quantitative Thinking	Mean for this group 2000	Mean for this group 2001	Change
Freshmen	1.79	1.99	+.20
Sophomores	1.96	2.12	+.16
Juniors	2.20	2.40	+.20
Seniors	2.06	2.24	+.18
All students	1.95	2.15	+.20

The other CSEQ item that Evergreen reports as an Accountability Performance Measure is “understanding other people and how to get along with other people.” This item is tracked for all students, not just freshmen. In 2001, the group mean on this item decreased to 3.29 from 3.32. It is only a slight decline, and only 2% of this year’s students reported “very little” progress in this area, but there is room for improvement. Here is a comparison of 2000 and 2001 data on this measure. The data in the table suggests that freshmen and juniors remained fairly constant on this measure in 2000 and 2001, while seniors increased considerably. Most of the decline in appears to be in the sophomore class ratings.

Understanding Other People	Mean for this group 2000	Mean for this group 2001	Change
Freshmen	3.29	3.30	+.01
Sophomores	3.49	3.25	-.24
Juniors	3.28	3.27	-.01
Seniors	3.16	3.34	+.18
All students	3.32	3.29	-.03

V. Significant Differences Between Groups

Four items with overall low mean scores were examined further to see if significant score differences exist among different groups of students. These items were “background for further education in a prof/sci/scholarly field,” “use of computers,” “quantitative thinking,” and “new scientific/technical developments.” As might be expected, class standing showed a significant difference for all four items,

with higher class standing in general corresponding to higher mean rank scores (Kruskal-Wallis nonparametric mean rank test, $p = .001, .007, .005$ and $.001$, respectively) . The mean rank score item “background for further education in a pro/sci/scholarly field” was significantly higher for transfer students than those beginning at Evergreen ($p = .003$). The items “background for further education in a prof/sci/scholarly field” and “new scientific/technical developments” were significantly lower for students of ages 22 or younger compared to students older than 22 ($p = .001$ and $.014$, respectively). There were no significant differences for these four items by gender or by race (collapsed as Caucasian/People of Color).

Ordinal and multinomial logistic regressions were conducted separately for each item to examine the above differences in a multivariate context. When class standing, age group, transfer status, gender, and (collapsed) race/ethnicity are entered into multivariate models, only class standing remains as a significant variable (i.e., when controlling for class standing, there are no significant differences in item mean score remaining for the other variables). The sole exception to this occurs in the multinomial logistic regression model for the “quantitative thinking” item, where students 22 or younger indicate significantly lower scores even when controlling for class standing ($p = .047$).

VI. Trends Over Time

The following series of charts depicts the mean scores on each CSEQ Learning Gains item by class standing for the last five survey administrations (Spring 95 through Spring 01). Determining if the changes are significant would require additional study.

